



## PATENT ABSTRACTS OF JAPAN

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**SAKATA KANJI**(54) **HEAT EXCHANGER**

protect the heat exchanger 1.

(57) Abstract:

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PURPOSE: To solve the problems such as deformation, deterioration and wear on the surface of a heat exchanger, by covering the surface of the heat exchanger with a wear-resisting, net-like surface protecting member.

CONSTITUTION: Air of  $C^{\circ}\text{C}$  and  $C\%$  is passed through a right half of a heat exchanger 1 in a direction shown by arrows 7, 7' in the drawing, while air of  $A^{\circ}\text{C}$  and  $A\%$  is passed through a left half of the heat exchanger 1 in a direction shown by 6, 6'. The heat exchanger 1 causes total heat exchange while it is turned by a motor 2 in a direction shown by an arrow 8. In such an arrangement, surface protecting members 9, made of a wear-resisting material and formed with such net-like or honeycomb-shaped pores as may not cause resistance to the air flow 7, 7' and 6, 6', are attached to both sides 10, 11 of the heat exchanger 1. Further, wear-resisting seal members 5 for sealing the heat exchanger 1 and a case 4 are fixed to the case 4 in the manner that they are held in contact with the surface of the protecting members 9, so that the protecting members 9 are kept in sliding contact with the seal members 5 in place of the heat exchanger 1 itself. Therefore, it is enabled to

